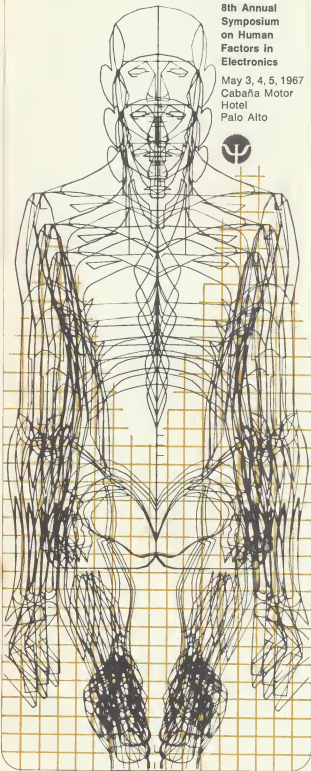


I. E. E. E.

8th Annual
Symposium
on Human
Factors in
Electronics

May 3, 4, 5, 1967
Cabaña Motor
Hotel
Palo Alto





Advance

Program

8th Annual

Symposium

on Human

Factors in

Electronics

Theme:

Automation-

Performance-

Acceptance:

Compromises

in System

Design

May 3-4-5,

1967

Palo Alto

Cabaña

Motor Hotel

Drawing produced by
Computer Graphics,
The Boeing Company

Technical Tours

Stanford Linear Accelerator
and Stanford Automated
Teaching Center May 4, 1:30
NASA-Ames Research Center
May 4, 1:30

Optional Night Life Tour

To San Francisco, including
dinner May 3, 7:30-12:30

Exhibits

Scientific and commercial
exhibits of interest to human
factors engineers.

Hosted Cocktail Hours

May 3, 5:30-7:30
May 4, 6:00-7:30

Organized Luncheons and Banquet

[with noted speakers]
May 3, 12:00-2:00
May 4, 7:45-9:00
May 5, 12:15-2:00

Women's Activities

May 3, 8:30-4:00

Welcome Address (at Cabaña
Stanford University (campus
tour)
Allied Arts Guild (objets d'art
Stanford Shopping Center
Town and Country (shopping)

May 4, 9:00-4:00

Sunset Magazine Gardens and
Offices (tour)
Mayfield Mall (shopping)
(Cabaña at lunch time)
Paul Masson Champagne
Cellars (wine tasting and tour)
Villa Montalvo, Former
Governor's Palace (house and
garden tour)

accommodations

Cabaña Motor Hotel
4290 El Camino Real
Palo Alto, California 94036
Telephone (415) 327-0800
Cabaña Rates:
Single \$15.00
Double \$20.00
Twin \$20.00

Other motels in close proximity
to the Cabaña:

Rickeys Hyatt House
Dinah's Motor Hotel
Caravan Inn
Marco Polo Motel
International Inn

For reservation information
the above motels, please
contact:

Mr. William Ereneta
Serendipity Associates
199 1st Street
Los Altos, California 94022
Telephone: (415) 941-3300

technical program

Tuesday, May 2

6:00–8:00 p.m. Registration, Cabaña Lobby

Wednesday, May 3

8:00 a.m. Registration, Cabaña Lobby

8:30 a.m. Welcome Address by Conference Chairman — Steven E. Belsley, Deputy Assistant Director for Life Sciences, NASA-Ames Research Center, Moffett Field, California

9:00–12:00 a.m. **Session A: Models of Cognitive Processes**

Chairman: Richard D. Smallwood
Stanford University
Stanford, California

"Conceptual Models for Human Functioning and Change Processes," by Willis W. Harman

"Human and Artificial Belief Systems," by Kenneth M. Colby

"Diagnostic Decision-Making in a Bayesian Framework," by L. P. Schrenk and A. F. Kanarick

"Modelling the Sonar Operator's Detection Process," by Joseph G. Wohl

"The Effect of Preview on Information Transmission Rate," by William R. Ferrell

"Toward a Model of Perceptual Narrowing," by Gershon Weltman

9:00–12:00 a.m. **Session B: Man-Machine Considerations in Sensory Aids Design**

Chairman: Patrick W. Nye
Willis H. Booth Computing Center
California Institute of Technology
Pasadena, California

"Human Factors in the Design of Sensory Aids Displays, Processors, and Sensors," by John K. Dupress

"Towards an Improved Optophone — Experiments with a Musical Code," by Michael P. Beddoes

"A Recognition Type Reading Machine for the Blind," by Glendon C. Smith

"Page Position Selection for Use with a Reading Machine for the Blind," by Donald Troxel

"Recent Progress in the Development of an Electro-Myographically Controlled Limb," by Robert W. Mann

"Research on Phenomena of Electrical Stimulation of Touch and its Possible Application to the Navigational Problems of Blindness," by Robert H. Gibson

"A Viewpoint on Current Man-Machine Problems in Sensory Aid Design and their Influence on Future Research Strategy," by Benjamin W. White

12:00–2:00 p.m. Luncheon — Speaker to be announced

**Session C: Behavioral
Models for Manned
Vehicle Control**

Chairman: Duane McRuer
Systems Technology, Inc.
Hawthorne, California

"A Decision and Control
Theory Model for Human
Controller Adaptive
Response," by Jerome I.
Elkind

"Human Operator Output
Noise: Central Versus
Peripheral Performance
Limitation," by Richard W.
Pew, J. C. Duffendack, and
L. K. Fensch

"Measuring Human
Performance with a
Parameter Tracking
Version of the Crossover
Model," by Glenn A.
Jackson

"A Model of an Operator-
Tactile Display
Combination," by Robert
E. Fenton

"Methodological Studies of
Tracking Behavior: The
Effects of Supplemental
Feedbacks," by J. Ward
and J. Senders

**Session D: Interactive
Computer-Display Systems**

Chairman: Robert Taylor
Advanced Research
Projects Agency
Washington, D. C.

"The GRAIL Project," by
John F. Heafner

"Graphics on the TX-2
Computer," by Paul D.
Rovner

"Graphics at University of
California, Berkeley," by
Gary D. Hornbuckle

Thursday, May 4

8:30-12:00 a.m.

"Computer-Display
Research at Stanford
Research Institute," by
Stephen R. Levine

**Session E: Command-
Control Systems**

Chairman: Ralph Seitle
Philco-Ford Corporation
Palo Alto, California

"Space Control," film b
Philco-Ford Corporation
Palo Alto, California

"Display/Control Syste
at NASA Mission Contr
Center, Houston," by
Herbert C. Hendrickson

"Design and Simulation
Information Retrieval
Systems, With Applica
to Telephone Informat
Bureaus," by Jonathan

"Links and Kinks in
Communication Sub-
Systems," by J. Albert
Southern

"Development and
Utilization of a Navy
Digital Simulation
Complex for Training a
Research," by Patricia
Stephens

"Simulation as a Tool fo
System Training in
Command/Control
Systems," by J. L. Hoyt

**Session F: Human Facto
in Transportation Vehi**

Chairman: George A.
Hoffman
Institute of Transporta
and Traffic Engineering
University of Californi
Los Angeles, California

"The Future of Individ
Transportation System
by Howard R. Ross

"Highway Route Coding for Automatic Recognition," by R. H. Emery and J. Z. Grayum

"Human Factors in Transit User Transferring," by Robert B. Sleight

"Surface Effect Vehicle — Aircraft or Ship?," by Alfred Skolnick

"A Human Factors Program for Surface Effect Ships," by T. E. Mansfield

"Human Factors in Ship Concept Formulation," by A. W. Peters and E. M. Ramras

"The Dangers of Technology," by Martin Wohl

1:30–5:00 p.m.

Ames Research Center
Tour: Wind Tunnels, Computers, and Research Areas

1:30–5:00 p.m.

Stanford University Tour:
Accelerator and Automated Teaching Center

1:30–4:30 p.m.

Session G: Measurement of Speech Quality

Chairman: H. R. Silbiger
Bell Telephone Laboratories
Holmdel, New Jersey

"Speech Transmission Quality Evaluation," by H. R. Silbiger and J. L. Sullivan

"Evaluation of Communication Systems from the Standpoint of Speaker Recognizability," by W. D. Voiers

"The Isopreference Method for Speech Quality Measurements," by E. H. Rothaus and G. E. Urbanek

1:30–4:30 p.m.

"Multidimensional Aspects of Speech Quality," by F. R. Clarke

Session H: New Considerations for Automating and Conceptualizing Electronic Maintenance

Chairman: Bernard Manheimer
Center for Naval Analyses of the Franklin Institute
Arlington, Virginia

"A Minimum-Cost Bayesian Model for Troubleshooting," by R. L. Hershman

"In-Flight Maintenance: An Essential for Prolonged Manned Space Missions," by Edward P. Goodrich

"Predicting the Maintenance Burden for Alternate Automatic Fault Location Designs," by Bernard Manheimer

"Computerized Aid to Signal Tracing," by G. Grant

"Human Factors in the Production of Microelectronic Devices," by Robert M. Springer and Douglas H. Harris

7:45 p.m.

Symposium Banquet —
Speaker to be announced

Friday, May 5
8:30–12:00 a.m.

Session I: Designing Vehicles for Automatic Control and Safety

Chairman: Slade Hulbert
Institute of Transportation and Traffic Engineering
University of California at Los Angeles, California

"Evolution Toward Automated Highway

"Automation of the Automobile," by R. L. Cosgriff and R. E. Fenton

Title to be announced —
by T. H. Rockwell

"Closed-Loop Directional Control of Automobiles,"
by D. H. Weir

"Simulation of Sudden Situations in Automobile Driving," by T. B. Sheridan and R. D. Roland

"Can Vigilance Be Taught?" by E. I. Wiener

Session J: Displays for Aerospace Applications

Chairman: R. O. Besco
American Airlines
Los Angeles, California

"Engineering Design as Applied to Simulation for Human Factors Research Studies," by Ronald D. Monroe

"Factors Affecting Design of the Head-Up Display,"
by J. M. Naish

"V/STOL Hover Displays — An Analysis and Design," by Paul R. Fuller, Roger Hardwicke, and Jerry Fellingner

"Summary of NASA Research on Flight Displays," by Roger Winblade

"Display Requirements for Aircraft Collision Avoidance," by Edward Eddowes

"Today's Pilot, Mission, and Aircraft," by Eric Guttman

Luncheon — Speaker to be announced

Checks should be made out to IEEE HUMAN FACTORS GROUP 6TH ANNUAL SYMPOSIUM. Registration rates are as indicated on the coupon. These rates include a copy of the symposium digest, two luncheons, and the banquet. Additional digests may be purchased at the registration desk.

☐	☐	San Francisco Night Life tion, dinner, drinks and
☐	☐	Tour I. NASA facility p.m., OR
☐	☐	Tour II. Stanford Univ Facility, 4 May at 1:30 p

Check Appropriate Spaces	Postmark Apr
Prices include digest	with 2 lunch 1 dinner
Member: IEEE ☐	\$25.50
Nonmember** ☐	\$35.50
Wives' Activities* ☐	\$ 3.00

** Cost to include two cocktail parties and tax



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IEEE Human Factors Group
8th Annual Symposium
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